

## Session Descriptions

The meeting will begin with a session of invited reviews of selected areas that are the subjects of critical questions in space radiation health research, as presented in the Strategic Program Plan of the NASA Space Radiation Health Program.

Regular sessions of invited and contributed talks will be organized around the major subject areas listed below. Please indicate on the registration form your first and second choice of sessions in which you would like to present.

### **Critical Radiation Hazards for Humans in Space**

- Acute effects due to SPE
- Carcinogenesis
- Compromised CNS function
- Other (please specify)

### **Complex radiation fields**

- Biological observables affected by nuclear interactions in matter
- Dosimetry
- Heavy charged particle transport
- Neutrons
- The space radiation environment
- Other (please specify)

### **Radiation response: molecules to cells**

- Apoptosis
- Cell cycle controls
- Cytogenetics
- DNA repair
- Genomic instability
- Induced gene expression
- Mutation
- Radiation quality-dependent effects
- Other (please specify)

### **Radiation response: cells to humans**

- Biomarkers
- Cancer
- Genomic instability
- Radiation quality-dependent effects
- Tissue and organ response
- Other (please specify)

### **Mechanisms of Radiation Action**

- Free radicals/Oxidative stress
- Genomic instability
- Influence of genomic background on radiation response
- Interplay between physics and biology for initial DNA damage
- Mutations
- Signal transduction
- Other (please specify)